

# TWO SISTERS, TWO SYSTEMS, ONE VIEW

Two experts offer their clinical experience with the OCULUS HD Disposable Lenses for vitreoretinal surgery.

## BY RETINA TODAY

Recent advances in lens technology and retinal imaging systems have given vitreoretinal surgeons novel viewing capabilities. *Retina Today* recently interviewed Audina (Nina) M. Berrocal, MD, FASRS, and María H. Berrocal, MD, to learn about their respective experiences with the OCULUS HD Disposable Lens for the BIOM® (see the *OCULUS HD Disposable Lens Portfolio*) and its version LenZ (both from OCULUS Surgical, Inc.) for use with the RESIGHT® Surgical Microscope (Carl Zeiss Meditec). Here, these surgeons and sisters describe their technological preferences for achieving the clearest, most efficient clinical treatments.

### OUR PRACTICES AND OR SETUPS

**Dr. María Berrocal:** The majority of my surgical cases are diabetic detachments, macular holes and puckers, and retinal detachments. My OR setup includes a LuxOR Revalia Ophthalmic Microscope (Alcon) and the NGenuity 3D Visualization System (Alcon). For wide-angle viewing, I use the OCULUS BIOM® non-contact viewing system with the OCULUS HD Disposable Lenses.

**Dr. Nina Berrocal:** My practice is eclectic. It spans complex cases to very straightforward ones: Retinopathy of prematurity, permanent keratoprosthesis, suprachoroidal detachments, buphthalmic eyes in children, trauma in children, multiple detachments in the pediatric population, gene therapy, and the run-of-the-mill macular

holes, epiretinal membranes, and rhegmatogenous detachments.

Recently, I transitioned my OR to exclusively using the NGenuity 3D system with both the Constellation Vision System (Alcon) and the EVA Phaco-Vitreotomy System (DORC), plus the ZEISS Rescan 700 iOCT (Carl Zeiss Meditec). I use the OCT in the Rescan as needed. My ideal combination now is the NGenuity with the OCULUS LenZ HD Disposable Lens with the RESIGHT®. The HD LenZ Disposable Lenses make the surgical view as clear and sharp as I need it to be.

### THE LENSES WE PREFER FOR VITRECTOMY SURGERY

**Dr. María Berrocal:** I prefer the single-use, disposable vitrectomy lenses—the OCULUS HD Disposable Lens and the HD Optic Set for BIOM® (OCULUS Surgical, Inc.)—because their angle of viewing is very large (approximately 130°), and their clarity is exquisite. One of the main problems with reusable lenses is that they get easily scratched from repeated autoclaving and wiping. The quality of the OCULUS HD Disposable Lenses is never compromised. Interestingly, I think the resolution of structures and the depth of focus afforded by these HD Lenses are much better than any other lenses.

The HD Lens' wide-viewing angle coupled with the NGenuity 3D system has several advantages when performing this type of surgery. I can see the eye on a very large screen, and I can magnify the operating area significantly. Using the HD Disposable Lens with the NGenuity 3D system allows me to



Image courtesy of Audina (Nina) M. Berrocal, MD, FASRS

Figure. A complex retinal surgery performed with the Versa HD Lens from OCULUS Surgical, Inc.

view the entire periphery, which has not always been the case with microscope-only viewing. This pairing gives me maximum magnification plus a full field of view. I appreciate that the HD Disposable Lenses work with my microscope of choice.

The primary benefit of the OCULUS HD Disposable Lenses is that it is never in direct contact with the cornea and therefore will not cause corneal damage. I am able to see all the way to the ora serrata by manipulating the HD Disposable Lens. Often, I can see the entire retina without having to depress the sclera. I can even use the HD Disposable Lens with the NGenuity 3D system to correct macular holes and puckers without having to use a contact lens for viewing.

**Dr. Nina Berrocal:** I am in love with the LenZ and the HD Lenses by

## THE OCULUS HD DISPOSABLE LENS PORTFOLIO

By Ariel Finkelstein, VP of Business Development, OCULUS Surgical, Inc.

The versatility and adaptability of the OCULUS HD Disposable Lens portfolio (OCULUS Surgical, Inc.) gives the surgeon the ability to choose the right tools to achieve the best surgical outcomes (Figure). This lens portfolio provides viewing solutions compatible with most microscope systems available on the market.



Figure. The HD Disposable LenZ (top) and Versa HD Lens (bottom) from OCULUS Surgical, Inc.

OCULUS. I remember the day I realized the difference between these and traditional vitrectomy lenses. I was operating on a tough case, using a glass lens from ZEISS RESIGHT®, and my view was hazy. I asked my assistant to change to the HD LenZ and voilà, my view of the surgical field was super clear. With both the LenZ and the Versa HD Lens, I have the clearest image I can get with every case, and I can use these lenses for macular work.

### WHY WE RECOMMEND THE OCULUS HD LENSES TO COLLEAGUES

**Dr. María Berrocal:** If you want to achieve the best possible view in vitreoretinal surgery, I believe the OCULUS HD Lenses are the best choice. An unobstructed view is important, especially in eyes that have some cataract or corneal opacities that limit the view of the fundus.

Furthermore, I have found other lenses to be too large in deep-set eyes or those with a prominent nose or brow. I do not have this problem when I use the Versa HD Lens from OCULUS in these challenging eyes, because it is narrow. I can position the instruments wherever I want, even at a steep angle, without the lens becoming an impediment. Even in children, the OCULUS HD Lens is so thin that it gives me easy access to the eye and a good view of the fundus without the risk that my hands or instruments will move it. I am

using the OCULUS HD Lens in about 80% of my surgeries.

Another reason I prefer the OCULUS HD Lenses is that they really enhance my depth of focus when I use a 3D imaging system. I often record my surgeries in 3D for teaching purposes, and the view through these HD lenses is unsurpassed. I feel they are a great benefit for surgical videos.

**Dr. Nina Berrocal:** I think every vitreoretinal surgeon should try the OCULUS HD Lenses. Their performance reminds me of the sharpness, wide field, and clarity that I would get with the contact AVI wide-field lenses (Advanced Visual Instruments). The Versa HD LenZ is fantastic for pediatric eyes, for long myopic eyes, and for those cases in which the nose is prominent. It allows me to complete the case with efficiency (Figure).

### CASE EXAMPLES

**Dr. María Berrocal:** I recently operated on a diabetic who had retinal detachment. This woman was in her late 80s and very thin, and her eye was extremely deep set. I started the procedure with the HD BIOM® Lens, but I was having a lot of difficulty moving the instruments around to repair the detachment. I kept moving the lens as I was moving the instruments, so I switched to the Versa HD Lens, and I was able to complete the case without having any loss of view or time.

**Dr. Nina Berrocal:** I recently operated on a child with a retinal detachment in a myopic eye with an axial length of 32 mm. The Versa HD Lens allowed me to do the case easily. I did not need long instruments, and I was able to use one lens efficiently.

### CONCLUSION

No matter the microscope system a surgeon chooses, the benefits of using OCULUS HD Disposable Lenses in vitreoretinal surgery remain the same: Exceptional clarity that is never compromised, a 130° field of view, a precise depth of field, a range of surgical applications, and no risk of cross-contamination.

For these reasons, Drs. Nina and María Berrocal, who use two different microscope systems, agreed that they continue to use the OCULUS HD Lenses in the majority of their surgeries, and they continue to be pleased with their results. In their experience, these lenses offer exceptional clarity, a large and precise field of view, and a range of surgical applications with little risk of cross-contamination. ■



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